

1  
SEQUENCE LISTING

<110> G2M Cancer Drugs AG  
Forschungszentrum Karlsruhe GmbH

<120> The use of molecular markers for the preclinical and clinical profiling of inhibitors of enzymes having histone deacetylase activity

<130> molecular markers

<160> 8

<170> PatentIn version 3.1

<210> 1

<211> 488

<212> PRT

<213> homo sapiens

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Pro His Arg Ile Arg Met Thr His Asn Leu Leu Leu Asn Tyr Gly Leu  
35 40 45

Tyr Arg Lys Met Glu Ile Tyr Arg Pro His Lys Ala Thr Ala Glu Glu  
50 55 60

Met Thr Lys Tyr His Ser Asp Glu Tyr Ile Lys Phe Leu Arg Ser Ile  
65 70 75 80

Arg Pro Asp Asn Met Ser Glu Tyr Ser Lys Gln Met His Ile Phe Asn  
85 90 95

Val Gly Glu Asp Cys Pro Ala Phe Asp Gly Leu Phe Glu Phe Cys Gln  
100 105 110

Leu Ser Thr Gly Gly Ser Val Ala Gly Ala Val Lys Leu Asn Arg Gln  
115 120 125

Gln Thr Asp Met Ala Val Asn Trp Ala Gly Gly Leu His His Ala Lys  
 130 135 140

Lys Tyr Glu Ala Ser Gly Phe Cys Tyr Val Asn Asp Ile Val Leu Ala  
 145 150 155 160

Ile Leu Glu Leu Leu Lys Tyr His Gln Arg Val Leu Tyr Ile Asp Ile  
 165 170 175

Asp Ile His His Gly Asp Gly Val Glu Glu Ala Phe Tyr Thr Thr Asp  
 180 185 190

Arg Val Met Thr Val Ser Phe His Lys Tyr Gly Glu Tyr Phe Pro Gly  
 195 200 205

Thr Gly Asp Leu Arg Asp Ile Gly Ala Gly Lys Gly Lys Tyr Tyr Ala  
 210 215 220

Val Asn Phe Pro Met Cys Asp Gly Ile Asp Asp Glu Ser Tyr Gly Gln  
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Ile Phe Lys Pro Ile Ile Ser Lys Val Met Glu Met Tyr Gln Pro Ser  
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Ala Val Val Leu Gln Cys Gly Ala Asp Ser Leu Ser Gly Asp Arg Leu  
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Gly Cys Phe Asn Leu Thr Val Lys Gly His Ala Lys Cys Val Glu Val  
 275 280 285

Val Lys Thr Phe Asn Leu Pro Leu Leu Met Leu Gly Gly Gly Tyr  
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Thr Ile Arg Asn Val Ala Arg Cys Trp Thr Tyr Glu Thr Ala Val Ala  
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Leu Asp Cys Glu Ile Pro Asn Glu Leu Pro Tyr Asn Asp Tyr Phe Glu  
 325 330 335

Tyr Phe Gly Pro Asp Phe Lys Leu His Ile Ser Pro Ser Asn Met Thr  
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Asn Gln Asn Thr Pro Glu Tyr Met Glu Lys Ile Lys Gln Arg Leu Phe  
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Glu Asn Leu Arg Met Leu Pro His Ala Pro Gly Val Gln Met Gln Ala  
 370 375 380

Ile Pro Glu Asp Ala Val His Glu Asp Ser Gly Asp Glu Asp Gly Glu  
 385 390 395 400

Asp Pro Asp Lys Arg Ile Ser Ile Arg Ala Ser Asp Lys Arg Ile Ala  
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Cys Asp Glu Glu Phe Ser Asp Ser Glu Asp Glu Gly Glu Gly Arg  
420 425 430

Arg Asn Val Ala Asp His Lys Lys Gly Ala Lys Lys Ala Arg Ile Glu  
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Glu Asp Lys Lys Glu Thr Glu Asp Lys Lys Thr Asp Val Lys Glu Glu  
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<213> homo sapiens

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Gly Val Trp Lys Val Arg Val Asp Leu Pro Asp Lys Tyr Pro Phe Lys  
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Ser Pro Ser Ile Gly Phe Met Asn Lys Ile Phe His Pro Asn Ile Asp  
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Glu Ala Ser Gly Thr Val Cys Leu Asp Val Ile Asn Gln Thr Trp Thr  
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Ala Leu Tyr Asp Leu Thr Asn Ile Phe Glu Ser Phe Leu Pro Gln Leu  
100 105 110

Leu Ala Tyr Pro Asn Pro Ile Asp Pro Leu Asn Gly Asp Ala Ala Ala  
115 120 125

Met Tyr Leu His Arg Pro Glu Glu Tyr Lys Gln Lys Ile Lys Glu Tyr  
130 135 140

Ile Gln Lys Tyr Ala Thr Glu Glu Ala Leu Lys Glu Gln Glu Glu Gly  
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Tyr Gln Phe Val Asn Asn Leu Ser Glu Glu Asp Tyr Arg Leu Met Arg  
35 40 45

Asp Asn Asn Leu Leu Gly Thr Pro Gly Glu Ser Thr Glu Glu Glu Leu  
50 55 60

Leu Arg Arg Leu Gln Gln Ile Lys Glu Gly Pro Pro Pro Gln Asn Ser  
65 70 75 80

Asp Glu Asn Arg Gly Gly Asp Ser Ser Asp Asp Val Ser Asn Gly Asp  
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Ser Ile Ile Asp Trp Leu Asn Ser Val Arg Gln Thr Gly Asn Thr Thr  
100 105 110

Arg Ser Gly Gln Arg Gly Asn Gln Ser Trp Arg Ala Val Cys Arg Thr  
115 120 125

Asn Pro Asn Ser Gly Asn Phe Arg Phe Ser Leu Glu Ile Asn Val Tyr  
130 135 140

Ser Asn Asn Gly Ser Gln Asn Ser Glu Asn Glu Asn Glu Pro Ser Ala  
145 150 155 160

Arg Arg Ser Ser Gly Glu Asn Val Glu Asn Asn Ser Gln Arg Gln Val

5

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Glu Asn Pro Arg Ser Glu Ser Thr Ser Ala Arg Pro Ser Arg Ser Glu  
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Arg Asn Ser Thr Glu Ala Leu Thr Glu Val Pro Pro Thr Arg Gly Gln  
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Arg Arg Ala Arg Ser Arg Ser Pro Asp His Arg Arg Thr Arg Ala Arg  
210                    215                    220

Ala Glu Arg Ser Arg Ser Pro Leu His Pro Met Ser Glu Ile Pro Arg  
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Arg Ser His His Ser Ile Ser Ser Gln Thr Phe Glu His Pro Leu Val  
245                    250                    255

Asn Glu Thr Glu Gly Ser Ser Arg Thr Arg His His Val Thr Leu Arg  
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Gln Gln Ile Ser Gly Pro Glu Leu Leu Ser Arg Gly Leu Phe Ala Ala  
275                    280                    285

Ser Gly Thr Arg Asn Ala Ser Gln Gly Ala Gly Ser Ser Asp Thr Ala  
290                    295                    300

Ala Ser Gly Glu Ser Thr Gly Ser Gln Arg Pro Pro Thr Ile Val  
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Leu Asp Leu Gln Val Arg Arg Val Arg Pro Gly Glu Tyr Arg Gln Arg  
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Asp Ser Ile Ala Ser Arg Thr Arg Ser Arg Ser Gln Thr Pro Asn Asn  
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Thr Val Thr Tyr Glu Ser Glu Arg Gly Gly Phe Arg Arg Thr Phe Ser  
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Arg Ser Glu Arg Ala Gly Val Arg Thr Tyr Val Ser Thr Ile Arg Ile  
370                    375                    380

Pro Ile Arg Arg Ile Leu Asn Thr Gly Leu Ser Glu Thr Thr Ser Val  
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Ala Ile Gln Thr Met Leu Arg Gln Ile Met Thr Gly Phe Gly Glu Leu  
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Ser Asn Arg Asn Met Glu Arg Ala Glu Ser Arg Ser Gly Arg Gly Gly  
435                    440                    445

Ser Gly Gly Gly Ser Ser Ser Gly Ser Ser Ser Ser Ser Ser Ser  
450 455 460

Ser Ser Ser Ser Ser Ser Ser Ser Ser Pro Ser Ser Ser  
465 470 475 480

Ser Gly Gly Glu Ser Ser Glu Thr Ser Ser Asp Leu Phe Glu Gly Ser  
485 490 495

Asn Glu Gly Ser Ser Ser Ser Gly Ser Ser Gly Ala Arg Arg Glu Gly  
500 505 510

Arg His Arg Ala Pro Val Thr Phe Asp Glu Ser Gly Ser Leu Pro Phe  
515 520 525

Leu Ser Leu Ala Gln Phe Phe Leu Leu Asn Glu Asp Asp Asp Asp Gln  
530 535 540

Pro Arg Gly Leu Thr Lys Glu Gln Ile Asp Asn Leu Ala Met Arg Ser  
545 550 555 560

Phe Gly Glu Asn Asp Ala Leu Lys Thr Cys Ser Val Cys Ile Thr Glu  
565 570 575

Tyr Thr Glu Gly Asn Lys Leu Arg Lys Leu Pro Cys Ser His Glu Tyr  
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His Val His Cys Ile Asp Arg Trp Leu Ser Glu Asn Ser Thr Cys Pro  
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610 615 620

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<212> PRT

<213> homo sapiens

<400> 4

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Val Leu Ile Val Ile Phe Thr Val Leu Leu Gln Ser Leu Cys Val Ala  
20 25 30

Val Thr Tyr Val Tyr Phe Thr Asn Glu Leu Lys Gln Met Gln Asp Lys  
35 40 45

Tyr Ser Lys Ser Gly Ile Ala Cys Phe Leu Lys Glu Asp Asp Ser Tyr  
50 55 60

Trp Asp Pro Asn Asp Glu Glu Ser Met Asn Ser Pro Cys Trp Gln Val  
65 70 75 80

Lys Trp Gln Leu Arg Gln Leu Val Arg Lys Met Ile Leu Arg Thr Ser  
85 90 95

Glu Glu Thr Ile Ser Thr Val Gln Glu Lys Gln Gln Asn Ile Ser Pro  
100 105 110

Leu Val Arg Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly  
115 120 125

Thr Arg Gly Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu  
130 135 140

Lys Ala Leu Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly  
145 150 155 160

His Ser Phe Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile  
165 170 175

His Glu Lys Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe  
180 185 190

Gln Glu Glu Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln  
195 200 205

Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys  
210 215 220

Ser Ala Arg Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr  
225 230 235 240

Ser Ile Tyr Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile  
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Phe Val Ser Val Thr Asn Glu His Leu Ile Asp Met Asp His Glu Ala  
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<212> DNA

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10

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&lt;211&gt; 1769

&lt;212&gt; DNA

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11

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